

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	168	micro\$processor with generat\$3 with (display adj data)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:00
L2	16	(micro\$processor with generat\$3 with (display adj data)) same (LCD)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:03
L3	35	((display adj data) with generated with ((micro\$processor or CPU))) same (LCD)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:04
L29	2867	(generat\$3 with (data) with (cpu or processor or controller)) same LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:16
L30	1011	(generated with (data) with (cpu or processor or controller)) same LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:17
L31	1011	((data) with generated with (cpu or processor or controller)) same LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:17
L32	11	((data) with generated with (cpu or processor or controller)) same (active with LCD)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/05 09:17

## EAST Search History

L33	7	("4872002"   "5900857"   "5923342"   "5953002"   "5974464"   "6144355"   "6246398").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/05 09:51
S1	6	Masahito near1 Fujihira	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:25
S2	4	Nohtomi near1 Shinobu	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:27
S3	49	Ota near1 Shigeru	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:34
S4	1403	(345/89).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/29 08:35
S5	1425	gradation adj voltage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:35
S6	86	S4 and S5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:35
S7	42332	pixel adj electrode	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:36
S8	415	S4 and S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:36

## EAST Search History

S9	42	S6 and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:36
S10	2005	(common adj voltage) same (common adj electrode)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:37
S11	9	S9 and S10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:44
S12	205	S5 same S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:44
S13	17	S4 and S12	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:45
S14	6	S13 and S10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 08:45
S23	1	08/574573	USPAT	OR	ON	2007/01/29 10:17
S24	1	S23 and ((common adj voltage) and (common adj electrode))	USPAT	OR	ON	2007/01/29 10:18
S27	1	08/870713	USPAT	OR	ON	2007/01/29 10:40
S28	1	S27 and ((common adj voltage) same (common adj electrode))	USPAT	OR	ON	2007/01/29 11:02
S29	27519	display adj data	USPAT	OR	ON	2007/01/29 11:02
S30	295	S29 and S4	USPAT	OR	ON	2007/01/29 11:03
S31	13	S30 and S10	USPAT	OR	ON	2007/01/29 11:39
S32	104480	LCD or (liquid adj crystal adj display)	USPAT	OR	ON	2007/01/29 11:41
S33	4470	common adj voltage	USPAT	OR	ON	2007/01/29 11:42

## EAST Search History

S34	138	shared adj voltage	USPAT	OR	ON	2007/01/29 11:42
S35	13852	common adj electrode	USPAT	OR	ON	2007/01/29 11:42
S37	4591	S33 or S34	USPAT	OR	ON	2007/01/29 11:45
S38	423	S35 with S37	USPAT	OR	ON	2007/01/29 11:48
S39	392	S32 and S38	USPAT	OR	ON	2007/01/29 11:48
S41	291	gradation adj voltage	USPAT	OR	ON	2007/01/29 11:49
S42	122025	pixel	USPAT	OR	ON	2007/01/29 11:49
S43	137	S41 with S42	USPAT	OR	ON	2007/01/29 11:49
S44	363	S42 and S39	USPAT	OR	ON	2007/01/29 11:49
S45	12	S43 and S39	USPAT	OR	ON	2007/01/29 11:50
S54	46	liquid adj crystal adj drive adj method	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:57
S55	685	gradation adj voltage	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:58
S56	517986	positive with negative	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:58
S57	98	S55 same S56	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:58
S58	85	S55 with S56	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:58
S59	22595	bit adj pattern	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 14:59
S63	27	S55 and S56 and "69"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:01
S64	9	S55 and S56 and S59	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:26
S65	11687	(scanning adj line) with ((pixel adj electrode) or pixel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:27

## EAST Search History

S66	2541	S32 and S65	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:27
S67	94	S65 same (gradation adj voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:31
S68	29	S32 and S67	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:28
S69	509	((pixel adj electrode) or pixel) with (gradation adj voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:33
S70	81	S65 same S69	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:33
S71	26	S70 and S32	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:52
S72	10	S70 and S32 and ((common adj electrode) with pixel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:53
S73	7	S70 and S32 and ((common adj electrode) with ( pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/29 15:59
S77	68	("5627561").URPN.	USPAT	OR	ON	2007/01/29 16:31

## EAST Search History

S83	1	(segment adj driver) same (gate adj driver) same (common adj electrode adj drive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:21
S84	2	(segment adj driver) and (gate adj driver) and (common adj electrode adj drive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:27
S85	3	2000-383012	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:26
S86	4	2001-397307	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:26
S87	14	(segment adj driver) and (common adj electrode adj drive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:28
S88	12	S87 not S84	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:28
S89	14	(segment adj driver) and ((common adj electrode adj drive) or (common adj electrode adj1 circuit))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 12:29
S90	12	S89 not S84	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:09

## EAST Search History

S91	14	(segment adj driver) and ((common adj electrode adj drive) or (commong adj electrode adj1 circuit))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:12
S92	4	S91 and (positive with negative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:09
S93	79	(common adj electrode adj1 circuit)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:13
S94	27	S93 and (positive with negative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:14
S95	5	S93 same (positive with negative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:33
S96	1	(segment adj1 driver) same (output adj gradation adj selector)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:34
S97	1	(segment adj1 driver) and (output adj gradation adj selector)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 16:34
S98	6	(segment adj1 driver) and (output adj gradation)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 17:17

## EAST Search History

S99	5	S98 and (voltage with pixel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:00
S10 0	65	signal\$line and (voltage with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:00
S10 1	17	signal\$line same (voltage with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:03
S10 2	6	S101 and (scanning\$line with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:05
S10 3	1	(scanning\$line with (selecting or choosing) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:09
S10 5	2	("6052103").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/30 18:09
S10 6	1	S105 and (voltage with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:13
S10 7	1	S105 and (signal\$line same (voltage with (pixel adj electrode)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:17



## EAST Search History

S10 8	1	S105 and ((voltage adj generator) or (voltage adj circuit) or (generator))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:19
S10 9	1	S105 and ((voltage adj generator) or (voltage adj circuit) or (generator) or (current adj generator))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:24
S11 0	3091	((segment or source) adj driver) and ((gate or common) adj driver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:25
S11 1	28	((segment or source) adj driver) and ((gate or common) adj driver) and ((common adj electrode adj2 circuit))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/30 18:25
S11 2	11844	(common adj voltage) or vcom	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 16:44
S11 3	236	gray\$scale same (common adj electrode)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 16:45
S11 4	66	S112 same S113	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 16:45
S12 0	2164	((vcom or (common adj voltage)) with (common adj electrode))	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 17:17
S12 1	538	((gray\$scale or gradation) adj voltage) with pixel	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 17:17

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S12 2	16	S120 same S121	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 17:18
S13 0	228	gray\$scale same (common adj electrode)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 17:32
S13 1	65	S120 same S130	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 17:32
S13 2	101	(gray\$scale with (pixel or (pixel adj electrode))) same (positive with negative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:47
S13 3	5587	(gray\$scale with (pixel or (pixel adj electrode)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:47
S13 4	635	(gray\$scale with voltage) with (pixel or (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:48
S13 5	236	((common adj voltage) or vcom) with (common adj electrode)) same (positive with negative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:49
S13 6	2	S134 same S135	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:51
S13 7	27	S134 and S135	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:51

## EAST Search History

S13 8	25	S137 not S136	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 07:51
S13 9	5	("4196432"   "5041823"   "5107353"   "5317334"   "5414443").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:01
S14 0	7	("4413256"   "4600274"   "4808991"   "4908609"   "4943802"   "4950058"   "4955697").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:03
S14 1	10	("4100579"   "4319237"   "4393380"   "4455576"   "4635127"   "4652872"   "4736137"   "4921334"   "4975691"   "5061920").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:09
S14 3	3	("5243333"   "6157360"   "6160533").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:26
S14 4	8	("5006739"   "5243333"   "5396165"   "6087885"   "6118261"   "6154083"   "6157180"   "6271699").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:27
S14 7	4	("6067064").URPN.	USPAT	OR	ON	2007/02/01 08:29
S14 8	10	("5264839"   "5266936"   "5414443"   "5523772"   "5534885"   "5583535"   "5642127"   "5828357"   "5917238"   "6002384").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:30
S14 9	17	("6160533").URPN.	USPAT	OR	ON	2007/02/01 08:32
S15 0	5	("20020036616"   "3668106"   "5627561"   "6373461"   "6650462").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:37
S15 1	17	("5640174").URPN.	USPAT	OR	ON	2007/02/01 08:38
S15 2	2	("4789223"   "5250937").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:40
S15 3	79	("4100579"   "4319237"   "4393380"   "4455576"   "4635127"   "4652872"   "4736137"   "4921334"   "4975691"   "5061920").PN. OR ("5414443"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:40

## EAST Search History

S15 4	16	("4737782"   "5196738"   "5414443"   "5623278"   "5726676"   "5796379"   "5877736"   "5953002").PN. OR ("6232941"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:48
S15 5	8	("20010048408"   "5574475"   "5604510"   "6028580"   "6307322"   "6504522"   "6535189"   "6549184").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 08:53
S15 6	0	("7084847").URPN.	USPAT	OR	ON	2007/02/01 08:55
S16 1	2	("6888526").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 09:14
S16 2	0	S161 and ((gradation or gray\$scale) with voltage with (pixel or electrode)) and (((common voltage) or vcom) with ((common adj electrode) or electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 09:19
S16 4	2	("5414443").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 09:19
S16 6	2250	((gradation or gray\$scale) with voltage with (pixel or electrode)) and (((common voltage) or vcom) with ((common adj electrode) or electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 09:38
S16 7	296	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common voltage) or vcom) with ((common adj electrode)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 09:38
S16 8	63	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common voltage) or vcom) with ((common adj electrode))with (positive with negative))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:03

## EAST Search History

S16 9	2	("6232941").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/03/05 10:45
S17 0	1	S169 and ((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common voltage) or vcom) with ((common adj electrode))with (positive with negative))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:17
S17 1	21	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common voltage) or vcom) with ((common adj electrode))with (positive with negative)) and memory	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:17
S17 2	7	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common voltage) or vcom) with ((common adj electrode))with (positive with negative)) and memory and (processor or cpu)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:24
S17 3	2	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common adj voltage) or vcom) with ((common adj electrode))with (positive with negative)) and memory and (processor or cpu)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:26
S17 4	6	((gradation or gray\$scale) with voltage with (pixel adj electrode)) and (((common adj voltage) or vcom) with ((common adj electrode))with (positive with negative)) and (processor or cpu)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:27
S17 5	6	S174 not 59]	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 10:27
S17 6	8	("4737782"   "5196738"   "5414443"   "5623278"   "5726676"   "5796379"   "5877736"   "5953002").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 10:32

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S17 8	25	("3522420"   "3560957"   "4038564"   "4180813"   "4193669"   "4210934"   "4353062"   "4427978"   "4429305"   "4554539"   "4571584"   "4685769"   "4748444"   "4859998"   "5099192"   "5175446"   "5196738"   "5198747"   "5237212"   "5243333"   "5262687"   "5276365"   "5300835").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 10:38
S18 1	2	("6052103").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 14:34
S18 2	0	("(segmentadjdriver)or(columnadjdr iver)or(sourceadjline)or(drainadjadd ress)").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 14:35
S18 3	39204	(segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:01
S18 4	1	((segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)) same ((out\$put adj (gradation or gray\$scale) adj (selector or choose)) with (signal adj line))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 14:38
S18 5	2	((segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)) same ((out\$put adj2 (gradation or gray\$scale) adj voltages) with (signal adj line))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 14:39
S18 6	16	((segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)) same (((gradation or gray\$scale) adj voltages) with (signal adj line))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:31
S18 7	6	("4748444"   "5337070"   "5596349"   "5729246"   "5790089"   "5828357").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 14:56

## EAST Search History

S18 9	2	("6232941").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 15:00
S19 0	0	S189 and ((segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)) same (((gradation or gray\$scale) adj voltages) with (signal adj line))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:00
S19 1	37704	S189 and (segment adj driver) or (column adj driver) or (source adj line) or (drain adj address)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:01
S19 2	0	S189 and ((segment adj driver) or (column adj driver) or (source adj line) or (drain adj address))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:01
S19 4	2	("6052103").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/03/05 10:44
S19 5	0	S194 and ((gradation or gray\$scale) with pixel) and ((scanning adj line) with pixel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:42
S19 6	1265	((gradation or gray\$scale) with pixel) and ((scanning adj line) with pixel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:43
S19 7	354	((gradation or gray\$scale) with pixel) and ((scanning adj line) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:47

## EAST Search History

S19 8	44	S197 and ((common adj electrode) with (opposite or in\$front\$of) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:44
S19 9	44	((gradation or gray\$scale) with pixel) and ((scanning adj line) with (pixel adj electrode)) and ((common adj electrode) with (opposite or in\$front\$of) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 15:48
S20 0	44	((gradation or gray\$scale) with pixel) and ((scanning adj line) with (pixel adj electrode)) and ((common adj electrode) with (opposite or in\$front\$of) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:02
S20 2	27	((gradation or gray\$scale) with voltage) with pixel) and ((scanning adj line) with (pixel adj electrode)) and ((common adj electrode) with (opposite or in\$front\$of) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:14
S20 3	2	("7084847").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 16:14
S20 4	0	S203 and (((gradation or gray\$scale) with voltage) with pixel) and ((scanning adj line) with (pixel adj electrode)) and ((common adj electrode) with (opposite or in\$front\$of) with (pixel adj electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:15
S20 7	1	S203 and (((gradation or gray\$scale) with voltage) with (pixel or electrode))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:16
S20 8	2	"20050219162"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:32



## EAST Search History

S20 9	19	((segment adj driver) or (source adj line)) with ((gradation or gray\$scale) with voltage) with (signal adj line)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:44
S21 1	0	((segment adj driver) or (source adj line)) same ((gradation or gray\$scale) with voltage) with (signal adj line) ) and (((gate adj1 driver) or (row adj driver) or (selection adj line) or (common adj driver)) with (scanning adj line) with time)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 16:47
S21 3	2	("6052103").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 16:52
S21 5	2	("6496945").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 17:49
S21 7	2	("20030217067").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 17:49
S21 8	2	("20030177210").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 17:54
S22 0	2	("6150774").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 17:55
S22 2	2	("6016038").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/01 17:56

## EAST Search History

S22 3	15	("20010020929"   "20020024482"   "20030058375"   "4626841"   "5184118"   "5606342"   "5724057"   "5892494"   "6219019"   "6456268"   "6501455"   "6549187"   "6549196"   "6670935"   "6727878").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 10:47
S22 4	3	("6670935").URPN.	USPAT	OR	ON	2007/02/05 10:48
S22 5	1	("20010013850").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 10:49
S22 6	4	("5726676"   "6222518"   "6750835"   "6825826").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 10:51
S22 7	15	("4395708"   "5220313"   "5682175"   "5748165"   "5754155"   "5818406"   "5886679"   "5973660"   "5995073"   "6025835"   "6049321"   "6064362"   "6069605"   "6166725"   "6181600").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 10:52
S22 8	18	("3938136"   "3955185"   "4141002"   "4781437"   "5027040"   "5088018"   "5252954"   "5266936"   "5301047"   "5363118"   "5365250"   "5402142"   "5414443"   "5440323"   "5517212"   "5574474"   "5627556"   "5729246").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 10:59
S22 9	10	("4100579"   "4319237"   "4393380"   "4455576"   "4635127"   "4652872"   "4736137"   "4921334"   "4975691"   "5061920").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 11:01
S23 0	69	("5414443").URPN.	USPAT	OR	ON	2007/02/05 11:02
S23 1	34	("3938136"   "3955185"   "4141002"   "4781437"   "5027040"   "5088018"   "5252954"   "5266936"   "5301047"   "5347294"   "5363118"   "5365250"   "5402142"   "5414443"   "5440323"   "5469068"   "5517212"   "5574474"   "5627556"   "5642126"   "5673061"   "5680148"   "5729246"   "5844536"   "5859632"   "5929847"   "6002384"   "6151005"   "6172663"   "6219016"   "6222515"   "6310616"   "6331797"   "6437716").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/05 11:06

## EAST Search History

S23 2	0	"10822730"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/05 11:20
S23 3	0	"10822730"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/05 11:20
S23 4	2	"20040104874"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/05 11:21
S23 5	2	"20040104874"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/05 14:51
S23 6	1	("7173591").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/06 10:33
S24 8	1	S236 and (display data same (conversion same (positive with negative)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 10:35
S25 4	1	processor same ((display adj date) with generat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:01

## EAST Search History

S25 5	22	processor and ((display adj date) with generat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:12
S25 6	2	processor and ((display adj date) with generat\$4) and LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:14
S25 7	5	((display adj date) with generat\$4) and LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:16
S25 8	2313	((display adj data) with generat\$4) and LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:17
S25 9	168	(processor with ((display adj data) with generat\$4) )and LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:17
S26 0	34	(processor with ((display adj data) with generat\$4) )same LCD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/06 11:17
S27 7	4	("5828357"   "6040813"   "6570549"   "6914589").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:13
S27 8	9	(level adj shifter) with boost with (charge adj pump adj circuit)	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:17
S27 9	18	(level adj shifter) with (boost or increase or higher) with (charge adj pump adj circuit)	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:18

## EAST Search History

S28 1	34	(level adj shifter) with (boost or increase or higher) with (charge adj pump)	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:18
S28 2	6	(level adj shifter) with (boost or increase or higher) with (charge adj pump) and (LCD or TFT)	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:22
S28 3	1	"20020171607"	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/06 14:22
S28 4	6	("4906984"   "5196738"   "5250937"   "5414443"   "5489917"   "5623278").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:23
S28 5	204	semiconductor with (LSI) with TFT	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:24
S28 6	202	semiconductor! with (LSI) with TFT	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:24
S28 7	1	S286 same (Vcom or (common adj voltage))	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:24
S28 8	11	S286 and (Vcom or (common adj voltage))	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:42
S28 9	633	(wave\$form) with LCD	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:49
S29 0	1486	(driv\$3 with display) with binary	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:44
S29 1	4	(wave\$form) with LCD with binary	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/07 15:44
S29 2	418	(345/95).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/08 14:30
S29 5	1616	(345/100).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/14 15:26

## EAST Search History

S29 6	0	S295 and ((level adj shifter) with (boost adj volt\$3) with (charge adj pump))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/14 15:42
S29 7	1424	(345/211).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/14 15:27
S29 9	82446	("345").CLAS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/02/14 15:27
S30 7	6	("5198767"   "5343217"   "5402142"   "5404150"   "5510814"   "5859632").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/14 15:41